

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	ET Docket 01-278
Review of Part 15 and other Parts of the)	RM-9375
Commission's Rules)	RM-10051
)	

To: The Secretary

Motion to Accept Late-filed Comments

Appairent Technologies, Inc, respectfully request that the Comission accept and consider these late comments on the above captioned proceeding. We became aware of the proceeding after the due date.

Respectfully,

James D. Allen - PE

Vice President of Research and Engineering
Vice Chair of IEEE 802.15 and 802.15.3

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To: The Secretary

Reply Comments of Apparent Technologies, Inc.

Apparent Technologies, Inc. ("Apparent") respectfully requests your consideration of these late comments for the above-captioned proceeding.

Apparent is a start-up manufacturer of Wireless Personal Area Network ("WPANTM") devices and systems. Apparent also actively participates in the IEEE 802.15 Wireless Personal Area Network Standards Working Group, and IEEE 802.11 Wireless Local Area Network Standards Working Group, which develops industry standards for systems that operate as unlicensed devices under Part 15 of the Commission's rules, and will be a member of the new WiMedia and Zigbee organizations which are industry organization that promote and certifies interoperability of IEEE 802.15.3 and IEEE 802.15.4 products. Apparent is an interested party in this proceeding.

In their comments filed in this proceeding, XM Radio Inc. ("XM") and Sirius Satellite Radio Inc. ("Sirius") both make sweeping requests for drastic reductions in the long-standing limits on out-of-band emissions allowed for unlicensed devices operating under Part 15 of the Commission's rules. These requests raise a number of complex technical issues with potentially significant impacts on the manufacturers of WPAN and WLAN equipment and could, if granted, require extensive and costly redesign of entire product lines and customer value propositions which currently comply with the Commission's existing rules in all respects.

It is clear that Appairant will not be able to respond in time to provide the Commission a complete analysis of the impact of this request since we became aware of the request after the comment due date. We would, nonetheless, appreciate the board considering the following concerns, and would appreciate an opportunity to provide more data as the process permits.

We respectfully request that the ISM out of band limits remain the same because:

1- A reduction in the out of band limits as proposed will increase the manufacturing cost of our devices 20 to 50%. Since our devices are targeted at the consumer electronics market, this reduces the viability of some market segments and will result in financial difficulty. We have independently estimated the value of this market to be in excess of \$3 billion internationally.

2- This request seems to be in conflict with the digital modulation rules being considered by the FCC for 47 CFR 12.247. One of the goals the proposed digital modulation rules in the ISM bands is to allow manufacturers the freedom to create new products that delivered higher data rates or ranges at low costs for home and business applications. A change in the out-of-band limits would increase the consumer's cost of these products even more, and cause economic hardship for ISM band based companies anticipating the new ruling.

3- This request would create significant differences between the United States' rules and those of other countries. Adopting the request will require us and other manufacturers to create significantly different products in order to sell in both the United States and overseas. Small companies such as ours may have to offset the increased cost by moving our operations to other countries.

4- Current international standards as well as standards in the draft approval phases have been developed based on the existing rules. Changing the out-of-band emission rules will require the standards organizations to modify the standards and issue new ones. One consequence would be that it would likely take two years for the changes to move through the approval process, delaying the availablilty of products based on these standards. Changes would include:

1. reduction of the transmit power

2. reduction the number of simultaneous channels
3. change the the channel center frequencies
4. change the number of channels available for hopping

Any of these changes would create products that do not provide backward compatibility with the millions of devices now in use. Consumers and businesses who are current users of WLAN and WPAN solutions would be required to upgrade or replace there current investment in infrastructure and "end points" in order to be compatible and compliant. Another consequence of the request is the possibility of devices crowding into a smaller portion of the ISM band, increasing the amount of interference from themselves as well as from other unintentional radiators in this band, e.g. microwave ovens and microwave lighting. Increased interference and reduced number of channels will provide less overall throughput to businesses and consumers who rely on these products for connecting their computers and consumer electronic devices.

Current standards that would be affected include IEEE 802.11 (ISO/IEC 8802.11), IEEE 802.11b and IEEE 802.15.1. Standards currently in the approval process that would be affected include IEEE 802.16, IEEE 802.11g, IEEE 802.15.3, IEEE 802.15.4 as well as the recommended practice, IEEE 802.15.2.

Again, we respectfully request that the ISM out-of-band limits remain unchanged.

Respectfully submitted,

By: James D. Allen - PE
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